

## **ABSTRACT**

**AIM:** To study the risk group, diverse clinical presentation, course, diagnosis and management of tuberculous uveitis.

**STUDY DESIGN:** Prospective Descriptive Study

**SAMPLE SIZE:** 30

### **MATERIALS AND METHODS:**

**INCLUSION CRITERIA:** 1) Patients with positive Mantoux test i.e. 10mm or more induration at 48-72 hours with or without specific lesion in chest radiography. 2) Evidence of active uveitis i.e. inflammatory cellular reaction in anterior chamber or keratic precipitates or vitreous cells or choroiditis or optic neuritis or retinal vasculitis. 3) Patients with positive contact history or known pulmonary or extra-pulmonary tuberculosis.

**EXCLUSION CRITERIA:** 1) Patients treated elsewhere for the presenting complaints. 2) Patients with infectious uveitis other than tubercular etiology. 3) Patients diagnosed as non-infectious uveitis.

**METHODOLOGY:** A detailed history regarding the symptoms - duration, course and recurrence, contact history and previous history of any forms of tuberculosis treated or untreated with anti-tuberculous therapy were noted in patients who fulfilled the above inclusion and exclusion criteria. Systemic examination included cervical lymph nodes

and respiratory system. Ocular examination included BCVA using Snellen chart converted to Log Mar scale for statistical purpose, measuring intraocular pressure using Goldmann Applanation Tonometer, examination of anterior segment using slit-lamp and posterior segment using +90D biomicroscopy. Fundus Fluorescein Angiography was done when required. Laboratory investigations included hemoglobin, total blood count, differential blood count, erythrocyte sedimentation rate, blood sugar, HIV-ELISA, VDRL, HLA-B27, Toxocara ELISA, TORCH serology tests, Tuberculin skin test and chest radiograph. Patients were referred to pulmonologist and were started on anti-tuberculous chemotherapy along with steroids either in oral, topical, periocular or in all forms. Patients were followed up in 2 weeks, 1 month and 3 months duration.

**RESULTS:** In this study, maximum number of patients (40%) were in the age group between 35-44 years. There were 11 (63.3%) female patients and 19 (36.7%) male. The incidence of tuberculous uveitis was higher in patients with exposure to or contact with tuberculosis (66.6%) followed by patients with previous extra-pulmonary tuberculosis (16.66%). Left eye was affected at an increased frequency 43.3% followed closely by right eye 33.3% and both eyes were affected in only 23.3% of the patients. 26 patients (86.7%) complained of defective vision, only 3 (10%) patients had complaints of redness, pain and photophobia, 10 (33.3%) patients complained of floaters. In this study, 6 (20%) patients had a history of recurrence of the disease. Tubercular uveitis presenting as posterior uveitis was the commonest presentation with 22 (73.3%) patients, followed by intermediate uveitis in 5 (16.7%) patients. 2 (6.7%) patients presented with anterior

uveitis and 1 (3.3%) patient presented with panuveitis. In this study, of the 23 patients who had posterior segment involvement, choroiditis and choroidal tuberculoma had equal distribution with 7 (30.4%) patients each. They are closely followed by choroidal tubercle presented in 5 (21.7%) patients. Serpiginous-like choroiditis was presented in 2 (8.7%) patients. Optic nerve tuberculoma and tuberculoma with retinal vasculitis was presented in 1 (4.4%) patient each. 7(23.3%) patients had bilateral involvement. Severe defective vision <6/60 was present in 13 (43.3%) patients, moderate defective vision 6/18-6/60 was present in 11(36.7%) patients, mild defective vision 6/9-6/12 was present in 3 (10.0%) patient. There was no defective vision in 3(10.0%) patients. ESR at 1 hour was raised in 24 (80.0%) patients. In this study, the mean best corrected visual acuity in patients was 0.80 in Log MAR scale at presentation which improved to 0.38 at 2 weeks following treatment and to 0.14 following 3 months of treatment. Rapid improvement in vision occurred in the first two weeks following treatment. On comparing the means of BCVA at presentation with 2 weeks of treatment and with 3 months of treatment it showed statistically significant improvement ( $p<0.001$ ).

**CONCLUSION:**Exposure history and past history of tuberculosis, Mantoux positivity, indolent recurrent course and the variable presentations should be considered in arriving at a presumed diagnosis of tuberculous uveitis. Choroiditis and choroidal tuberculoma are the most common presentation followed by intermediate uveitis. Patients responded to treatment with anti-tuberculosis therapy and corticosteroids with statistically significant

improvement in vision and there were no recurrences in the follow-up period. Concurrent anti tuberculous treatment should be started with steroids to prevent recurrences.

**KEYWORDS:**Choroiditis, Choroidal Tuberculoma, Granulomatous Uveitis, Tubercular retinal vasculitis, Tubercular Uveitis.